```
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
```

```
  CCCCCCCC  NN      NN  FFFFFFFFFF    IIIIII    NN      NN  TTTTTTTTTT  RRRRRRRR    PPPPPPPP    TTTTTTTTTT
  CCCCCCCC  NN      NN  FFFFFFFFFF    IIIIII    NN      NN  TTTTTTTTTT  RRRRRRRR    PPPPPPPP    TTTTTTTTTT
CC          NN      NN  FF              II      NN      NN      TT      RR      RR  PP      PP      TT
CC          NN      NN  FF              II      NN      NN      TT      RR      RR  PP      PP      TT
CC          NNNN    NN  FF              II      NNNN    NN      TT      RR      RR  PP      PP      TT
CC          NNNN    NN  FF              II      NNNN    NN      TT      RR      RR  PP      PP      TT
CC          NN  NN  NN  FFFFFFFF        II      NN  NN  NN      TT      RRRRRRRR    PPPPPPPP        TT
CC          NN  NN  NN  FFFFFFFF        II      NN  NN  NN      TT      RRRRRRRR    PPPPPPPP        TT
CC          NN    NNNN  FF              II      NN    NNNN      TT      RR  RR      PP              TT
CC          NN    NNNN  FF              II      NN    NNNN      TT      RR  RR      PP              TT
CC          NN      NN  FF              II      NN      NN      TT      RR    RR    PP              TT
CC          NN      NN  FF              II      NN      NN      TT      RR    RR    PP              TT
  CCCCCCCC  NN      NN  FF          IIIIIII     NN      NN      TT      RR      RR  PP              TT
  CCCCCCCC  NN      NN  FF          IIIIIII     NN      NN      TT      RR      RR  PP              TT

LL              IIIIII      SSSSSSSS
LL              IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

```
;  1     0001  0 %TITLE  'DECnet Ethernet Configurator Module'
;  2     0002  0 MODULE CNFINTRPT        (
;  3     0003  0                         LANGUAGE (BLISS32),
;  4     0004  0                         IDENT = 'V04-000'
;  5     0005  0                         ) =
;  6     0006  0 !
;  7     0007  0 !*****************************************************************************
;  8     0008  0 !*                                                                           *
;  9     0009  0 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
; 10     0010  0 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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; 17     0017  0 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
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; 19     0019  0 !*                                                                           *
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; 21     0021  0 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
; 22     0022  0 !*  CORPORATION.                                                             *
; 23     0023  0 !*                                                                           *
; 24     0024  0 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS   *
; 25     0025  0 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
; 26     0026  0 !*                                                                           *
; 27     0027  0 !*                                                                           *
; 28     0028  0 !*****************************************************************************
; 29     0029  0 !
; 30     0030  0
; 31     0031  0 !++
; 32     0032  0 ! FACILITY:     DECnet Configurator Module (NICONFIG)
; 33     0033  0 !
; 34     0034  0 ! ABSTRACT:
; 35     0035  0 !
; 36     0036  0 !       This module contains the routines for establishing, and breaking
; 37     0037  0 !       logical links to NICONFIG.
; 38     0038  0 !
; 39     0039  0 ! ENVIRONMENT:  VAX/VMS Operating System
; 40     0040  0 !
; 41     0041  0 ! AUTHOR:       Bob Grosso,     CREATION DATE:  13-Oct-1982
; 42     0042  0 !
; 43     0043  0 ! MODIFIED BY:
; 44     0044  0 !
; 45     0045  0 !       V03-001 RPG0001         Bob Grosso              02-May-1983
; 46     0046  0 !                               Ensure NICONFIG will die gracefully on Network Shutdown.
; 47     0047  0 !--
; 48     0048  1 BEGIN
```

```
;    50          0049  1 %SBTTL  'Definitions'
;    51          0050  1
;    52          0051  1 !
;    53          0052  1 ! INCLUDE FILES:
;    54          0053  1 !
;    55          0054  1
;    56          0055  1 LIBRARY 'SYS$LIBRARY:STARLET';  ! VMS common definitions
;    57          0056  1
;    58          0057  1 LIBRARY 'SHRLIB$:NET';          ! Network definitions
;    59          0058  1
;    60          0059  1 LIBRARY 'SHRLIB$:NMALIBRY';     ! NICE Code definitions
;    61          0060  1
;    62          0061  1 REQUIRE 'LIB$:CNFDEF.R32';
;    63          0152  1
;    64          0153  1 REQUIRE 'SRC$:CNFPREFIX.REQ';
;    65          0250  1
;    66          0251  1
;    67          0252  1 !
;    68          0253  1 ! BUILTIN functions
;    69          0254  1 !
;    70          0255  1
;    71          0256  1 BUILTIN
;    72          0257  1     INSQUE,                     ! INSQUE instruction
;    73          0258  1     REMQUE;                     ! REMQUE instruction
;    74          0259  1
;    75          0260  1 !
;    76          0261  1 !       Own storage
;    77          0262  1 !
;    78          0263  1
;    79          0264  1 OWN
;    80          0265  1     SI_IOSB :   BBLOCK [8];     ! IO status block for
;    81          0266  1
;    82          0267  1 !
;    83          0268  1 ! TABLE OF CONTENTS:
;    84          0269  1 !
;    85          0270  1
;    86          0271  1 FORWARD ROUTINE
;    87          0272  1
;    88          0273  1         CNF$SOLICIT_INTERRUPT   : NOVALUE,      ! Solicit work items
;    89          0274  1         NET_INTERRUPT           : NOVALUE,      ! Action routine to receive first SET command
;    90          0275  1         OPEN_REQUEST_LINK       : NOVALUE,      ! Open incoming request logical link
;    91          0276  1         CNF$CLOSE_REQUEST_LINK  : NOVALUE,      ! Close request logical link
;    92          0277  1         SHUTDOWN                : NOVALUE,      ! Shut down receiver gracefully
;    93          0278  1         CNF$SOLICIT_REQUEST     : NOVALUE,      ! Perform a read on the logical link
;    94          0279  1         REQUEST_RECEIVED        : NOVALUE;      ! Accept incoming request record
;    95          0280  1
;    96          0281  1
;    97          0282  1
;    98          0283  1 !
;    99          0284  1 ! EXTERNAL REFERENCES:
;   100          0285  1 !
;   101          0286  1
;   102          0287  1 EXTERNAL ROUTINE
;   103          0288  1
;   104          0289  1     ! Module CNFMAIN
;   105          0290  1
;   106          0291  1         CNF$EXIT,               ! Clean up and exit
```

```
;  107          0292  1          CNF$TRACE,                  ! Log messages to log file
;  108          0293  1          CNF$LOG_DATA,               ! Log messages to log file
;  109          0294  1          CNF$GET_ZVM,                ! Get zeroed virtual memory
;  110          0295  1          CNF$FREE_VM,                ! Free virtual memory
;  111          0296  1
;  112          0297  1      ! Module CNFREQUES
;  113          0298  1
;  114          0299  1          CNF$DISABLE_SURVEIL     : NOVALUE,      ! Discontinue surveillance on specified circuit
;  115          0300  1          CNF$PROCESS_REQUEST     : NOVALUE,      ! Parse and perform requested function
;  116          0301  1
;  117          0302  1      ! Module CNFWORKQ
;  118          0303  1
;  119          0304  1          WKQ$ADD_WORK_ITEM,      ! Add work to work queue
;  120          0305  1          WKQ$DO_WORK_ITEM;       ! Add work to work queue
;  121          0306  1
;  122          0307  1
;  123          0308  1  EXTERNAL LITERAL
;  124          0309  1
;  125          0310  1          CNF$_MAILBOX,           ! Mailbox error
;  126          0311  1          CNF$_CHAN,              ! Error assigning or deassigning channel
;  127          0312  1          CNF$_LINK,              ! Error on logical link
;  128          0313  1
;  129          0314  1          CNF$C_MAXMBXMSG,        ! Maximum mailbox message size
;  130          0315  1          CNF$C_SYNCH_EFN,        ! Synchronous event flag number
;  131          0316  1          CNF$C_ASYNCH_EFN;       ! Asynchronous event flag number
;  132          0317  1
;  133          0318  1
;  134          0319  1  EXTERNAL
;  135          0320  1
;  136          0321  1          CNF$A_MBXMSG : VECTOR [,BYTE],          ! Mailbox message buffer
;  137          0322  1          CNF$W_NETCHAN : WORD,                   ! Channel opened to network
;  138          0323  1          CNF$W_MBXCHAN : WORD,                   ! Channel to mailbox
;  139          0324  1          CNF$B_SURVEILLANCE_SET,                 ! Boolean: mark if useful work is being accomplished
;  140          0325  1          CNF$GL_LOGMASK : BITVECTOR [32],        ! Logging control mask
;  141          0326  1          CNF$GQ_CIRSURLST : VECTOR [2],          ! List of circuit under surveillance
;  142          0327  1          CNF$GQ_IRBLST : VECTOR [2];             ! Listhead for incoming links
;  143          0328  1
```

```
;  145          0329  1 %SBTTL  'CNF$SOLICIT_INTERRUPT   Request network interrupts for Connect requests and Shutdown '
;  146          0330  1 GLOBAL ROUTINE CNF$SOLICIT_INTERRUPT: NOVALUE =
;  147          0331  1
;  148          0332  1 !++
;  149          0333  1 ! FUNCTIONAL DESCRIPTION:
;  150          0334  1 !
;  151          0335  1 !  Issue an asynchronous QIO on the associated mailbox
;  152          0336  1 !  for the network channel in expectation of receiving
;  153          0337  1 !  requests for connects, or Shutdown notification.
;  154          0338  1 !  Called the first time from MAIN routine in user mode
;  155          0339  1 !  and subsequent times from NET_INTERRUPT to execute in AST mode.
;  156          0340  1 !
;  157          0341  1 ! FORMAL PARAMETERS:
;  158          0342  1 !       NONE
;  159          0343  1 !
;  160          0344  1 ! IMPLICIT INPUTS:
;  161          0345  1 !
;  162          0346  1 !       CNF$W_MBXCHAN   Channel number for mailbox
;  163          0347  1 !       CNF$A_MBXMSG    Buffer for mailbox msg
;  164          0348  1 !
;  165          0349  1 ! IMPLICIT OUTPUTS:
;  166          0350  1 !       NONE
;  167          0351  1 !
;  168          0352  1 ! ROUTINE VALUE:
;  169          0353  1 ! COMPLETION CODES:
;  170          0354  1 !
;  171          0355  1 !  Errors are signalled
;  172          0356  1 !
;  173          0357  1 ! SIDE EFFECTS:
;  174          0358  1 !       NONE
;  175          0359  1 !
;  176          0360  1 !--
;  177          0361  1
;  178          0362  2 BEGIN
;  179          0363  2
;  180          0364  2     LOCAL
;  181          0365  2         STATUS;
;  182          0366  2
;  183          0367  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  184          0368  2         $DESCRIPTOR ('cnf$solicit_interrupt'));
;  185          0369  2
;  186        P 0370  2     STATUS = $QIO (
;  187        P 0371  2                 FUNC = IO$_READVBLK,     ! Request read on mailbox
;  188        P 0372  2                 CHAN = .CNF$W_MBXCHAN,   ! Use assigned channel
;  189        P 0373  2                 EFN = CNF$C_ASYNCH_EFN,  ! Asynchronous Event flag number
;  190        P 0374  2                 IOSB = SI_IOSB,          ! Interrupt request block
;  191        P 0375  2                 ASTADR = NET_INTERRUPT,  ! AST routine to execute on read completion
;  192        P 0376  2                 P1 = CNF$A_MBXMSG,       ! Buffer to contain mailbox message
;  193          0377  2                 P2 = CNF$C_MAXMBXMSG);   ! Size maximum on mailbox message
;  194          0378  2
;  195          0379  2     IF NOT .STATUS
;  196          0380  2     THEN                                 ! report an error
;  197          0381  2         SIGNAL (CNF$_MAILBOX, 0, .STATUS);
;  198          0382  2
;  199          0383  2     RETURN;
;  200          0384  1 END;                                     ! End routine CNF$SOLICIT_INTERRUPT
```

```
                                                                        .TITLE  CNFINTRPT DECnet Ethernet Configurator Module
                                                                        .IDENT  \V04-000\

                                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                                                45  43  41  52  54  00000 P.AAB:  .ASCII  \TRACE\                                  ;
                                                                    00005       .BLKB   3                                           ;
                                                            00000005    00008 P.AAA:  .LONG   5                                     ;
                                                            00000000'   0000C         .ADDRESS P.AAB                            ;
74  6E  69  5F  74  69  63  69  6C  6F  73  24  66  6E  63  00010 P.AAD:  .ASCII  \cnf$solicit_interrupt\                          ;
                                        74  70  75  72  72  65  0001F                                                           ;
                                                                    00025       .BLKB   3
                                                            00000015    00028 P.AAC:  .LONG   21                                    ;
                                                            00000000'   0002C         .ADDRESS P.AAD                            ;

                                                                        .PSECT  $OWN$,NOEXE,2

                                                                    00000 SI_IOSB:.BLKB   8

                                                                        .EXTRN  CNF$EXIT, CNF$TRACE
                                                                        .EXTRN  CNF$LOG_DATA, CNF$GET_ZVM
                                                                        .EXTRN  CNF$FREE_VM, CNF$DISABLE_SURVEIL
                                                                        .EXTRN  CNF$PROCESS_REQUEST
                                                                        .EXTRN  WKQ$ADD_WORK_ITEM
                                                                        .EXTRN  WKQ$DO_WORK_ITEM
                                                                        .EXTRN  CNF$_MAILBOX, CNF$_CHAN
                                                                        .EXTRN  CNF$_LINK, CNF$C_MAXMBXMSG
                                                                        .EXTRN  CNF$C_SYNCH_EFN
                                                                        .EXTRN  CNF$C_ASYNCH_EFN
                                                                        .EXTRN  CNF$A_MBXMSG, CNF$W_NETCHAN
                                                                        .EXTRN  CNF$W_MBXCHAN, CNF$B_SURVEILLANCE_SET
                                                                        .EXTRN  CNF$GL_LOGMASK, CNF$GQ_CIRSURLST
                                                                        .EXTRN  CNF$GQ_IRBLST, SYS$QIO

                                                                        .PSECT  $CODE$,NOWRT,2

                                                                0000 00000      .ENTRY  CNF$SOLICIT_INTERRUPT, Save nothing         ; 0330
                                                        0000'   CF   9F 00002   PUSHAB  P.AAC                                      ; 0368
                                                        0000'   CF   9F 00006   PUSHAB  P.AAA                                      ; 0367
                                                                01   DD 0000A   PUSHL   #1                                          ;
                                                0000G   CF              03   FB 0000C   CALLS   #3, CNF$TRACE                       ;
                                                                        7E   7C 00011   CLRQ    -(SP)                               ; 0377
                                                                        7E   7C 00013   CLRQ    -(SP)                               ;
                                                            00000000G   8F   DD 00015   PUSHL   #CNF$C_MAXMBXMSG                   ;
                                                                0000G   CF   9F 0001B   PUSHAB  CNF$A_MBXMSG                        ;
                                                                        7E   D4 0001F   CLRL    -(SP)                               ;
                                                                0000V   CF   9F 00021   PUSHAB  NET_INTERRUPT                       ;
                                                                0000'   CF   9F 00025   PUSHAB  SI_IOSB                             ;
                                                                        31   DD 00029   PUSHL   #49                                 ;
                                                        7E          0000G   CF   3C 0002B   MOVZWL  CNF$W_MBXCHAN, -(SP)             ;
                                                            00000000G   8F   DD 00030   PUSHL   #CNF$C_ASYNCH_EFN                   ;
                                                00000000G   00              0C   FB 00036   CALLS   #12, SYS$QIO                    ;
                                                            11              50   E8 0003D   BLBS    STATUS, 1$                      ; 0379
                                                                            50   DD 00040   PUSHL   STATUS                          ; 0381
                                                                            7E   D4 00042   CLRL    -(SP)                           ;
                                                            00000000G       8F   DD 00044   PUSHL   #CNF$_MAILBOX                  ;
```

```
                     00000000G  00          03  FB 0004A                CALLS   #3, LIB$SIGNAL                          ;
                                             04 00051 1$:             RET                                             ; 0384

; Routine Size:  82 bytes,    Routine Base:  $CODE$ + 0000
```

```
;   202     0385  1 %SBTTL  'net_interrupt  Process Net interrupts for Shutdown or Connect Request'
;   203     0386  1 ROUTINE NET_INTERRUPT : NOVALUE =
;   204     0387  1
;   205     0388  1 !++
;   206     0389  1 !
;   207     0390  1 !  This AST routine is called when the outstanding QIO
;   208     0391  1 !  on the associated mailbox completes.  If the interrupt
;   209     0392  1 !  indicates a connect is pending, then the acceptance
;   210     0393  1 !  routine is added to the work queue.
;   211     0394  1 !
;   212     0395  1 !--
;   213     0396  1
;   214     0397  2     BEGIN
;   215     0398  2     BIND
;   216     0399  2         MESSAGE_TYPE = CNF$A_MBXMSG [0] : BYTE;         ! First byte contains code for message type
;   217     0400  2
;   218     0401  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   219     0402  2         $DESCRIPTOR ('Net_Interrupt'));
;   220     0403  2
;   221     0404  2     !
;   222     0405  2     !   Check message type.  If connect request, then connect and wait
;   223     0406  2     !   for a set.  Anything else is bad news.
;   224     0407  2     !
;   225     0408  2     SELECTONEU .MESSAGE_TYPE OF
;   226     0409  2     SET
;   227     0410  2
;   228     0411  2     [MSG$_NETSHUT]:                                     ! Network shutting down
;   229     0412  2
;   230     0413  3         BEGIN
;   231     0414  3         WKQ$ADD_WORK_ITEM(SHUTDOWN);                    ! Shut down receiver gracefully
;   232     0415  3         CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   233     0416  3                 $DESCRIPTOR ('Net_Interrupt - Network shutting down'));
;   234     0417  3         RETURN;                                         ! Do not re-issue mailbox read
;   235     0418  2         END;
;   236     0419  2
;   237     0420  2
;   238     0421  2     [MSG$_CONNECT]:                                     ! Incoming connect request
;   239     0422  3         BEGIN
;   240     0423  3         LOCAL
;   241     0424  3             PTR,LEN,
;   242     0425  3             IRB:        REF BBLOCK;                     ! Incoming Request Block
;   243     0426  3
;   244     0427  3         CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   245     0428  3                 $DESCRIPTOR ('Net_Interrupt - Connect request received'));
;   246     0429  3
;   247     0430  3         LEN = IRB$C_LENGTH;
;   248     0431  3         CNF$GET_ZVM (LEN,IRB);                          ! Allocate incoming request block
;   249     0432  3         IRB [IRB$W_SIZE] = IRB$C_LENGTH;                ! Set length of block
;   250     0433  3         PTR = 5 + .CNF$A_MBXMSG [4];                    ! Get index of start of ascic data
;   251     0434  3         IRB [IRB$B_NCBLEN] = .CNF$A_MBXMSG  [.PTR];     ! Set length of NCB
;   252     0435  3         CH$COPY (.CNF$A_MBXMSG  [.PTR], CNF$A_MBXMSG  [.PTR+1],
;   253     0436  3                 0, IRB$C_MAXNCBLEN, IRB [IRB$T_NCB]);
;   254     0437  3         IRB [IRB$L_BNR_FLINK] = IRB [IRB$L_BNR_FLINK];  ! Initialize list for Bufferred NICE Messages
;   255     0438  3         IRB [IRB$L_BNR_BLINK] = IRB [IRB$L_BNR_FLINK];
;   256     0439  3         INSQUE (.IRB, .CNF$GQ_IRBLST [1]);              ! Insert into list
;   257     0440  3
;   258     0441  3         WKQ$ADD_WORK_ITEM(OPEN_REQUEST_LINK,.IRB);      ! Queue the connect accept
```

```
;  259          0442  2          END;
;  260          0443  2
;  261          0444  2      [OTHERWISE]:
;  262          0445  3          BEGIN
;  263          0446  3          CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE *** ERROR'),
;  264          0447  3              $DESCRIPTOR ('Net_Interrupt - Unprocessed Interrupt'));
;  265          0448  2          END;
;  266          0449  2
;  267          0450  2      TES;
;  268          0451  2
;  269          0452  2      CNF$SOLICIT_INTERRUPT();                    ! Issue another read on mailbox
;  270          0453  2
;  271          0454  2      CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  272          0455  2          $DESCRIPTOR ('Net_Interrupt - Interrupt dispatched, another solicited'));
;  273          0456  2
;  274          0457  2      RETURN;
;  275          0458  1      END;                        ! Routine net_interrupt


                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                                  45  43  41  52  54   00030 P.AAF:   .ASCII  \TRACE\                          ;
                                                       00035          .BLKB   3
                                00000005               00038 P.AAE:   .LONG   5                              ;
                                00000000'              0003C          .ADDRESS P.AAF                        ;
        74  70  75  72  72  65  74  6E  49  5F  74  65  4E   00040 P.AAH:   .ASCII  \Net_Interrupt\           ;
                                                       0004D          .BLKB   3
                                0000000D               00050 P.AAG:   .LONG   13                             ;
                                00000000'              00054          .ADDRESS P.AAH                        ;
                                          45  43  41  52  54   00058 P.AAJ:   .ASCII  \TRACE\                 ;
                                                       0005D          .BLKB   3
                                00000005               00060 P.AAI:   .LONG   5                              ;
                                00000000'              00064          .ADDRESS P.AAJ                        ;
2D  20  74  70  75  72  72  65  74  6E  49  5F  74  65  4E   00068 P.AAL:   .ASCII  \Net_Interrupt - Network shutting down\  ;
69  74  74  75  68  73  20  6B  72  6F  77  74  65  4E  20   00077                                             ;
                                    6E  77  6F  64  20  67  6E   00086                                         ;
                                                       0008D          .BLKB   3
                                00000025               00090 P.AAK:   .LONG   37                             ;
                                00000000'              00094          .ADDRESS P.AAL                        ;
                                          45  43  41  52  54   00098 P.AAN:   .ASCII  \TRACE\                 ;
                                                       0009D          .BLKB   3
                                00000005               000A0 P.AAM:   .LONG   5                              ;
                                00000000'              000A4          .ADDRESS P.AAN                        ;
2D  20  74  70  75  72  72  65  74  6E  49  5F  74  65  4E   000A8 P.AAP:   .ASCII  \Net_Interrupt - Connect request received\  ;
73  65  75  71  65  72  20  74  63  65  6E  6E  6F  43  20   000B7                                             ;
                        64  65  76  69  65  63  65  72  20  74   000C6                                         ;
                                00000028               000D0 P.AAO:   .LONG   40                             ;
                                00000000'              000D4          .ADDRESS P.AAP                        ;
52  4F  52  52  45  20  2A  2A  2A  20  45  43  41  52  54   000D8 P.AAR:   .ASCII  \TRACE *** ERROR\          ;
                                                       000E7          .BLKB   1
                                0000000F               000E8 P.AAQ:   .LONG   15                             ;
                                00000000'              000EC          .ADDRESS P.AAR                        ;
2D  20  74  70  75  72  72  65  74  6E  49  5F  74  65  4E   000F0 P.AAT:   .ASCII  \Net_Interrupt - Unprocessed Interrupt\  ;
6E  49  20  64  65  73  73  65  63  6F  72  70  6E  55  20   000FF                                             ;
                                    74  70  75  72  72  65  74   0010E                                         ;
                                                       00115          .BLKB   3
```

```
                                                00000025  00118 P.AAS:  .LONG    37                                                      ;
                                                00000000' 0011C         .ADDRESS P.AAT                                                   ;
                                          45 43 41 52 54  00120 P.AAV:  .ASCII   \TRACE\                                                 ;
                                                          00125         .BLKB    3                                                       ;
                                                00000005  00128 P.AAU:  .LONG    5                                                       ;
                                                00000000' 0012C         .ADDRESS P.AAV                                                   ;
2D 20 74 70 75 72 72 65 74 6E 49 5F 74 65 4E    00130 P.AAX:  .ASCII   \Net_Interrupt - Interrupt dispatched, an\                        ;
70 73 69 64 20 74 70 75 72 72 65 74 6E 49 20    0013F                                                                                    ;
                6E 61 20 2C 64 65 68 63 74 61   0014E                                                                                    ;
64 65 74 69 63 69 6C 6F 73 20 72 65 68 74 6F    00158         .ASCII   \other solicited\                                                 ;
                                                00167         .BLKB    1                                                               ;
                                                00000037  00168 P.AAW:  .LONG    55                                                      ;
                                                00000000' 0016C         .ADDRESS P.AAX                                                   ;



                                                          .PSECT  $CODE$,NOWRT,2

                                                03FC 00000 NET_INTERRUPT:
                                                          .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9                                           ; 0386
                                          59    0000G CF 9E 00002         MOVAB   CNF$TRACE, R9                                          ;
                                          58    0000G CF 9E 00007         MOVAB   MESSAGE_TYPE, R8                                       ;
                                          57    0000' CF 9E 0000C         MOVAB   P.AAG, R7                                              ;
                                          5E             08 C2 00011      SUBL2   #8, SP                                                 ;
                                                         57 DD 00014      PUSHL   R7                                                     ; 0402
                                                      E8 A7 9F 00016      PUSHAB  P.AAE                                                  ; 0401
                                                         01 DD 00019      PUSHL   #1                                                     ;
                                          69             03 FB 0001B      CALLS   #3, CNF$TRACE                                          ;
                                          50             68 9A 0001E      MOVZBL  MESSAGE_TYPE, R0                                       ; 0408
                                          3B             50 91 00021      CMPB    R0, #59                                                ; 0411
                                                         11 12 00024      BNEQ    1$                                                     ;
                                                   0000V CF 9F 00026      PUSHAB  SHUTDOWN                                               ; 0414
                                             0000G CF       01 FB 0002A   CALLS   #1, WKQ$ADD_WORK_ITEM                                  ;
                                                      40 A7 9F 0002F      PUSHAB  P.AAK                                                  ; 0416
                                                      10 A7 9F 00032      PUSHAB  P.AAI                                                  ; 0415
                                                         7B 11 00035      BRB     4$                                                     ;
                                          32             50 91 00037 1$:   CMPB    R0, #50                                                ; 0421
                                                         5C 12 0003A      BNEQ    2$                                                     ;
                                                   0080  C7 9F 0003C      PUSHAB  P.AAO                                                  ; 0428
                                                      50 A7 9F 00040      PUSHAB  P.AAM                                                  ; 0427
                                                         01 DD 00043      PUSHL   #1                                                     ;
                                          69             03 FB 00045      CALLS   #3, CNF$TRACE                                          ;
                                       04    AE   015F 8F 3C 00048      MOVZWL  #351, LEN                                              ; 0430
                                                         5E DD 0004E      PUSHL   SP                                                     ; 0431
                                                      08 AE 9F 00050      PUSHAB  LEN                                                    ;
                                             0000G CF       02 FB 00053   CALLS   #2, CNF$GET_ZVM                                        ;
                                          56             6E D0 00058      MOVL    IRB, R6                                                ; 0432
                                       08    A6   015F 8F B0 0005B      MOVW    #351, 8(R6)                                            ;
                                          50          04 A8 9A 00061      MOVZBL  CNF$A_MBXMSG+4, PTR                                    ; 0433
                                          50             05 C0 00065      ADDL2   #5, PTR                                                ;
                                       24    A6         6840 90 00068      MOVB    CNF$A_MBXMSG[PTR], 36(R6)                              ; 0434
                                          51          6840 9A 0006D      MOVZBL  CNF$A_MBXMSG[PTR], R1                                  ; 0435
0040  8F       00    01 A840          51 2C 00071      MOVC5   R1, CNF$A_MBXMSG+1[PTR], #0, #64, 37(R6)                               ; 0436
                                             25    A6         0007A
                                       14    A6    14 A6 9E 0007C      MOVAB   20(R6), 20(R6)                                         ; 0437
                                       18    A6    14 A6 9E 00081      MOVAB   20(R6), 24(R6)                                         ; 0438
                                             0000G DF       66 0E 00086   INSQUE  (R6), @CNF$GQ_IRBLST+4                                 ; 0439
```

```
                                 6E  DD 0008B          PUSHL   IRB                                     ; 0441
                          0000V  CF  9F 0008D          PUSHAB  OPEN_REQUEST_LINK                       ;
                0000G     CF     02  FB 00091          CALLS   #2, @KQ$ADD_WORK_ITEM                   ;
                                 0D  11 00096          BRB     3$                                      ; 0408
                          00C8   C7  9F 00098 2$:      PUSHAB  P.AAS                                   ; 0447
                          0098   C7  9F 0009C          PUSHAB  P.AAQ                                   ; 0446
                                 01  DD 000A0          PUSHL   #1                                      ;
                           69        03  FB 000A2          CALLS   #3, CNF$TRACE                       ;
                FF04       CF        00  FB 000A5 3$:      CALLS   #0, CNF$SOLICIT_INTERRUPT           ; 0452
                          0118   C7  9F 000AA          PUSHAB  P.AAW                                   ; 0455
                          00D8   C7  9F 000AE          PUSHAB  P.AAU                                   ; 0454
                                 01  DD 000B2 4$:      PUSHL   #1                                      ;
                           69        03  FB 000B4          CALLS   #3, CNF$TRACE                       ;
                                     04  000B7          RET                                             ; 0458

; Routine Size:  184 bytes,    Routine Base:  $CODE$ + 0052
```

```
;   277     0459  1 %SBTTL  'open_request_link'
;   278     0460  1 ROUTINE OPEN_REQUEST_LINK (IRB): NOVALUE =
;   279     0461  1
;   280     0462  1 !---
;   281     0463  1 !
;   282     0464  1 !  Open the logical link for incoming request records.
;   283     0465  1 !  Executed off the work queue.
;   284     0466  1 !
;   285     0467  1 ! Inputs:
;   286     0468  1 !
;   287     0469  1 !       irb = Address of incoming request block
;   288     0470  1 !
;   289     0471  1 ! Outputs:
;   290     0472  1 !
;   291     0473  1 !  routine = True if link established, false if not
;   292     0474  1 !---
;   293     0475  1
;   294     0476  2 BEGIN
;   295     0477  2
;   296     0478  2 MAP
;   297     0479  2     IRB:        REF BBLOCK;                     ! Address of request block
;   298     0480  2
;   299     0481  2 LOCAL
;   300     0482  2     STATUS,
;   301     0483  2     PTR,
;   302     0484  2     NCB_DESC:   VECTOR [2];                     ! Descriptor of NCB
;   303     0485  2
;   304     0486  2 CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   305     0487  2         $DESCRIPTOR ('open_request_link'));
;   306     0488  2
;   307     0489  2 !
;   308     0490  2 !       Setup NCB for connect accept
;   309     0491  2 !
;   310     0492  2
;   311     0493  2 NCB_DESC [0] = .IRB [IRB$B_NCBLEN];             ! Get length of requestor ncb
;   312     0494  2 NCB_DESC [1] = IRB [IRB$T_NCB];                 ! and address of ncb
;   313     0495  2
;   314     0496  2 !
;   315     0497  2 !       Get copy of NCB up to slash to enable its use in error reporting
;   316     0498  2 !
;   317     0499  2
;   318     0500  2 PTR = CH$FIND_CH (.IRB [IRB$B_NCBLEN], IRB [IRB$T_NCB], '/');
;   319     0501  2
;   320     0502  2 IF NOT CH$FAIL (.PTR)                           ! If ending slash found,
;   321     0503  2 THEN
;   322     0504  2     IRB [IRB$B_NCBLEN] = .PTR - IRB [IRB$T_NCB]; ! then truncate rest of junk
;   323     0505  2
;   324     0506  2 !
;   325     0507  2 !       Setup NCB for accept by zeroing optional data sent by requestor
;   326     0508  2 !
;   327     0509  2
;   328     0510  2 (.PTR+3) <0,8> = 0;                             ! Zero optional data
;   329     0511  2
;   330   P 0512  2 STATUS = $ASSIGN (DEVNAM = %ASCID '_NET:',     ! Get channel for incoming link
;   331     0513  2                    CHAN = IRB [IRB$W_CHAN]);
;   332     0514  2
;   333     0515  2 IF NOT .STATUS                                  ! If error assigning channel,
```

```
;   334          0516  2 THEN
;   335          0517  3     BEGIN
;   336          0518  3     SIGNAL (CNF$_CHAN, 0, .STATUS);          ! then report the error
;   337          0519  3     CNF$CLOSE_REQUEST_LINK(.IRB);            ! and deallocate the storage
;   338          0520  3     RETURN;
;   339          0521  2     END;
;   340          0522  2
;   341        P 0523  2 STATUS = $QIOW(FUNC = IO$_ACCESS,            ! Accept the logical link
;   342        P 0524  2                CHAN = .IRB [IRB$W_CHAN],
;   343        P 0525  2                EFN = CNF$C_SYNCH_EFN,
;   344        P 0526  2                IOSB = IRB [IRB$W_IOSB],      ! Address of I/O status block
;   345          0527  2                P2 = NCB_DESC);               ! Address of network control block
;   346          0528  2
;   347          0529  2 IF .STATUS                                    ! If successfully submitted,
;   348          0530  2 THEN
;   349          0531  2     STATUS = .IRB [IRB$W_IOSB];              ! then pick up QIO final status
;   350          0532  2
;   351          0533  2 IF NOT .STATUS                                ! If error starting up link
;   352          0534  2 THEN
;   353          0535  3     BEGIN
;   354          0536  3     SIGNAL (CNF$_LINK, 0, .STATUS);          ! then report the error
;   355          0537  3     CNF$CLOSE_REQUEST_LINK(.IRB);            ! and deallocate the storage
;   356          0538  3     RETURN;
;   357          0539  2     END;
;   358          0540  2
;   359          0541  2
;   360          0542  2 CNF$SOLICIT_REQUEST (.IRB);                  ! Issue a QIO for an incoming request record
;   361          0543  2
;   362          0544  1 END;                                         ! End routine open_request_link


                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                    45  43  41  52  54  00170 P.AAZ:  .ASCII  \TRACE\                          ;
                                                        00175        .BLKB   3
                                        00000005        00178 P.AAY: .LONG   5                               ;
                                        00000000'       0017C        .ADDRESS P.AAZ                          ;
69  6C  5F  74  73  65  75  71  65  72  5F  6E  65  70  6F  00180 P.ABB:  .ASCII  \open_request_link\          ;
                                                    6B  6E  0018F                                            ;
                                                        00191        .BLKB   3
                                        00000011        00194 P.ABA: .LONG   17                              ;
                                        00000000'       00198        .ADDRESS P.ABB                          ;
                                00  00  00  3A  54  45  4E  5F  0019C P.ABD:  .ASCII  \_NET:\<0><0><0>       ;
                                        010E0005        001A4 P.ABC: .LONG   17694725                        ;
                                        00000000'       001A8        .ADDRESS P.ABD                          ;

                                                .EXTRN  SYS$ASSIGN, SYS$QIOW

                                                .PSECT  $CODE$,NOWRT,2

                                        000C 00000 OPEN_REQUEST_LINK:
                                                .WORD   Save R2,R3                                           ; 0460
                                    5E          08  C2 00002         SUBL2   #8, SP                          ;
                                0000'   CF  9F 00005                 PUSHAB  P.ABA                           ; 0487
                                0000'   CF  9F 00009                 PUSHAB  P.AAY                           ; 0486
                                            01  DD 0000D           PUSHL   #1                              ;
```

```
                0000G  CF              03  FB 0000F         CALLS   #3, CNF$TRACE                                    ;
                       52         04    AC  D0 00014         MOVL    IRB, R2                                         ; 0493
                       6E         24    A2  98 00018         CVTBL   36(R2), NCB_DESC                                ;
                    04 AE         25    A2  9E 0001C         MOVAB   37(R2), NCB_DESC+4                              ; 0494
                       50         24    A2  98 00021         CVTBL   36(R2), R0                                      ; 0500
          25   A2              50         2F  3A 00025         LOCC    #47, R0, 37(R2)                                 ;
                                          02  12 0002A         BNEQ    1$                                              ;
                                          51  D4 0002C         CLRL    R1                                              ;
                                          51  D5 0002E 1$:      TSTL    PTR                                             ; 0502
                                          09  13 00030         BEQL    2$                                              ;
                       50         25    A2  9E 00032         MOVAB   37(R2), R0                                      ; 0504
          24   A2              51         50  83 00036         SUBB3   R0, PTR, 36(R2)                                 ;
                                     03    A1  94 0003B 2$:     CLRB    3(PTR)                                          ; 0510
                                          7E  7C 0003E         CLRQ    -(SP)                                           ; 0513
                                     0A    A2  9F 00040         PUSHAB  10(R2)                                          ;
                                   0000'   CF  9F 00043         PUSHAB  P.ABC                                           ;
        00000000G  00                      04  FB 00047         CALLS   #4, SYS$ASSIGN                                  ;
                       53                  50  D0 0004E         MOVL    R0, STATUS                                      ;
                       0C                  53  E8 00051         BLBS    STATUS, 3$                                      ; 0515
                                          53  DD 00054         PUSHL   STATUS                                          ; 0518
                                          7E  D4 00056         CLRL    -(SP)                                           ;
                             00000000G    8F  DD 00058         PUSHL   #CNF$_CHAN                                      ;
                                          38  11 0005E         BRB     5$                                              ;
                                          7E  7C 00060 3$:     CLRQ    -(SP)                                           ; 0527
                                          7E  7C 00062         CLRQ    -(SP)                                           ;
                                     10    AE  9F 00064         PUSHAB  NCB_DESC                                        ;
                                          7E  7C 00067         CLRQ    -(SP)                                           ;
                                          7E  D4 00069         CLRL    -(SP)                                           ;
                                     0C    A2  9F 0006B         PUSHAB  12(R2)                                          ;
                                          32  DD 0006E         PUSHL   #50                                             ;
                                7E        0A    A2  32 00070         CVTWL   10(R2), -(SP)                           ;
                             00000000G    8F  DD 00074         PUSHL   #CNF$C_SYNCH_EFN                                ;
        00000000G  00                      0C  FB 0007A         CALLS   #12, SYS$QIOW                                   ;
                       53                  50  D0 00081         MOVL    R0, STATUS                                      ;
                       07                  53  E9 00084         BLBC    STATUS, 4$                                      ; 0529
                       53         0C    A2  32 00087         CVTWL   12(R2), STATUS                                  ; 0531
                       19                  53  E8 0008B         BLBS    STATUS, 6$                                      ; 0533
                                          53  DD 0008E 4$:      PUSHL   STATUS                                          ; 0536
                                          7E  D4 00090         CLRL    -(SP)                                           ;
                             00000000G    8F  DD 00092         PUSHL   #CNF$_LINK                                      ;
        00000000G  00                      05  FB 00098 5$:     CALLS   #3, LIB$SIGNAL                                  ;
                                          52  DD 0009F         PUSHL   R2                                              ; 0537
              0000V  CF                   01  FB 000A1         CALLS   #1, CNF$CLOSE_REQUEST_LINK                      ;
                                              04  000A6         RET                                                     ; 0535
                                          52  DD 000A7 6$:     PUSHL   R2                                              ; 0542
              0000V  CF                   01  FB 000A9         CALLS   #1, CNF$SOLICIT_REQUEST                         ;
                                              04  000AE         RET                                                     ; 0544

; Routine Size:  175 bytes,    Routine Base:  $CODE$ + 010A
```

```
;  364     0545  1 %SBTTL 'CNF$CLOSE_REQUEST_LINK'
;  365     0546  1 GLOBAL ROUTINE CNF$CLOSE_REQUEST_LINK (IRB): NOVALUE =
;  366     0547  1
;  367     0548  1 !---
;  368     0549  1 !
;  369     0550  1 !  Close the logical link for incoming request records.
;  370     0551  1 !
;  371     0552  1 ! Inputs:
;  372     0553  1 !
;  373     0554  1 !       irb = Address of incoming request block
;  374     0555  1 !
;  375     0556  1 ! Outputs:
;  376     0557  1 !
;  377     0558  1 !  None
;  378     0559  1 !
;  379     0560  1 ! Value:
;  380     0561  1 !  Signal any errors
;  381     0562  1 !---
;  382     0563  1
;  383     0564  2 BEGIN
;  384     0565  2
;  385     0566  2 MAP
;  386     0567  2     IRB:        REF BBLOCK;             ! Address of incoming request channel
;  387     0568  2
;  388     0569  2 LOCAL
;  389     0570  2     FREE_BNR : REF BBLOCK,
;  390     0571  2     LENGTH,
;  391     0572  2     STATUS;
;  392     0573  2
;  393     0574  2 CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  394     0575  2         $DESCRIPTOR ('CNF$CLOSE_REQUEST_LINK'));
;  395     0576  2
;  396     0577  2 IF .IRB [IRB$W_CHAN] NEQ 0              ! If channel was assigned,
;  397     0578  2 THEN
;  398     0579  3     BEGIN
;  399     0580  3     STATUS = $DASSGN (CHAN = .IRB [IRB$W_CHAN]); ! Deassign network channel
;  400     0581  3
;  401     0582  3     IF NOT .STATUS                      ! If error detected,
;  402     0583  3     THEN
;  403     0584  3         SIGNAL (CNF$_CHAN, 0, .STATUS); ! then report error
;  404     0585  2     END;
;  405     0586  2
;  406     0587  2 REMQUE (.IRB, STATUS);                  ! Remove from linked list
;  407     0588  2
;  408     0589  2 !
;  409     0590  2 !    If there are Bufferred NICE responses in the IRB, deallocate them.
;  410     0591  2 !
;  411     0592  2 FREE_BNR = .IRB [IRB$L_BNR_FLINK];
;  412     0593  2 WHILE .FREE_BNR NEQ IRB [IRB$L_BNR_FLINK] DO
;  413     0594  3     BEGIN
;  414     0595  3     REMQUE (.FREE_BNR, STATUS);
;  415     0596  3     EXECUTE (CNF$FREE_VM (FREE_BNR [BNR$W_LENGTH], FREE_BNR [BNR$L_ADDRESS]) );
;  416     0597  3     EXECUTE (CNF$FREE_VM (%REF (BNR$C_LENGTH), FREE_BNR) );
;  417     0598  3     FREE_BNR = .IRB [IRB$L_BNR_FLINK];
;  418     0599  2     END;
;  419     0600  2 LENGTH = .IRB [IRB$W_SIZE];             ! Get size of block
;  420     0601  2 EXECUTE (CNF$FREE_VM (LENGTH,IRB));     ! Deallocate storage
```

```
;  421          0602  2
;  422          0603  1 END;                                    ! End routine cnf$close_request_link


                                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                                 45  43  41  52  54  001AC P.ABF:   .ASCII  \TRACE\                                ;
                                                                     001B1           .BLKB   3
                                                             00000005    001B4 P.ABE:   .LONG   5                                    ;
                                                             00000000'   001B8          .ADDRESS P.ABF                           ;
45  55  51  45  52  5F  45  53  4F  4C  43  24  46  4E  43              001BC P.ABH:   .ASCII  \CNF$CLOSE_REQUEST_LINK\             ;
                              4B  4E  49  4C  5F  54  53                 001CB                                                    ;
                                                                     001D2           .BLKB   2
                                                             00000016    001D4 P.ABG:   .LONG   22                                   ;
                                                             00000000'   001D8          .ADDRESS P.ABH                           ;

                                                                .EXTRN  SYS$DASSGN

                                                                .PSECT  $CODE$,NOWRT,2

                                                                     001C 00000         .ENTRY  CNF$CLOSE_REQUEST_LINK, Save R2,R3,R4       ; 0546
                                                 54      0000G   CF   9E 00002         MOVAB   CNF$FREE_VM, R4                             ;
                                                 5E              0C   C2 00007         SUBL2   #12, SP                                     ;
                                                         0000'   CF   9F 0000A         PUSHAB  P.ABG                                       ; 0575
                                                         0000'   CF   9F 0000E         PUSHAB  P.ABE                                       ; 0574
                                                                 01   DD 00012         PUSHL   #1                                          ;
                                             0000G   CF          03   FB 00014         CALLS   #3, CNF$TRACE                               ;
                                                 52          04   AC   D0 00019         MOVL    IRB, R2                                     ; 0577
                                                             0A   A2   B5 0001D         TSTW    10(R2)                                      ;
                                                                  22   13 00020         BEQL    1$                                          ;
                                                 7E          0A   A2   32 00022         CVTWL   10(R2), -(SP)                               ; 0580
                                         00000000G   00          01   FB 00026         CALLS   #1, SYS$DASSGN                              ;
                                                 53              50   D0 0002D         MOVL    R0, STATUS                                  ;
                                                 11              53   E8 00030         BLBS    STATUS, 1$                                  ; 0582
                                                                 53   DD 00033         PUSHL   STATUS                                      ; 0584
                                                                 7E   D4 00035         CLRL    -(SP)                                       ;
                                                     00000000G   8F   DD 00037         PUSHL   #CNF$_CHAN                                  ;
                                         00000000G   00          03   FB 0003D         CALLS   #3, LIB$SIGNAL                              ;
                                                 53              62   0F 00044 1$:     REMQUE  (R2), STATUS                                ; 0587
                                                 50      04      AC   D0 00047         MOVL    IRB, R0                                     ; 0592
                                             04  AE          14   A0   D0 0004B         MOVL    20(R0), FREE_BNR                            ;
                                         52  04  AC              14   C1 00050         ADDL3   #20, IRB, R2                                ; 0593
                                                 52      04      AE   D1 00055 2$:     CMPL    FREE_BNR, R2                                ;
                                                                 2F   13 00059         BEQL    3$                                          ;
                                                 53      04      BE   0F 0005B         REMQUE  @FREE_BNR, STATUS                           ; 0595
                                             7E  04  AE          0C   C1 0005F         ADDL3   #12, FREE_BNR, -(SP)                        ; 0596
                                             7E  08  AE          08   C1 00064         ADDL3   #8, FREE_BNR, -(SP)                         ;
                                                 64              02   FB 00069         CALLS   #2, CNF$FREE_VM                             ;
                                                 2D              50   E9 0006C         BLBC    STATUS, 4$                                  ;
                                                         04      AE   9F 0006F         PUSHAB  FREE_BNR                                    ; 0597
                                                     04  AE          10   D0 00072         MOVL    #16, 4(SP)                                  ;
                                                         04      AE   9F 00076         PUSHAB  4(SP)                                       ;
                                                 64              02   FB 00079         CALLS   #2, CNF$FREE_VM                             ;
                                                 1D              50   E9 0007C         BLBC    STATUS, 4$                                  ;
                                         52  04  AC              14   C1 0007F         ADDL3   #20, IRB, R2                                ; 0598
                                             04  AE              62   D0 00084         MOVL    (R2), FREE_BNR                              ;
```

```
                                    CB  11 00088                BRB     2$                                      ; 0593
                          50        04  AC  D0 0008A 3$:          MOVL    IRB, R0                                 ; 0600
                    08    AE        08  A0  32 0008E            CVTWL   8(R0), LENGTH                           ;
                                    04  AC  9F 00093            PUSHAB  IRB                                     ; 0601
                                    0C  AE  9F 00096            PUSHAB  LENGTH                                  ;
                          64            02  FB 00099            CALLS   #2, CNF$FREE_VM                         ;
                                        04 0009C 4$:            RET                                             ; 0603

; Routine Size:  157 bytes,    Routine Base:  $CODE$ + 01B9
```

```
;  424          0604  1 %SBTTL 'shutdown'
;  425          0605  1 ROUTINE SHUTDOWN: NOVALUE =
;  426          0606  1
;  427          0607  1 !---
;  428          0608  1 !
;  429          0609  1 !  This routine is called when the network is shutting down to
;  430          0610  1 !  gracefully close all incoming links so that NICONFIG goes away quietly.
;  431          0611  1 !
;  432          0612  1 ! Inputs:
;  433          0613  1 !
;  434          0614  1 !       None
;  435          0615  1 !
;  436          0616  1 ! Outputs:
;  437          0617  1 !
;  438          0618  1 !       None
;  439          0619  1 !
;  440          0620  1 ! Effect:
;  441          0621  1 !
;  442          0622  1 !  Disabling all surveillance will cause NICONFIG to terminate
;  443          0623  1 !---
;  444          0624  1
;  445          0625  2 BEGIN
;  446          0626  2
;  447          0627  2 LOCAL
;  448          0628  2     PTR:        REF BBLOCK,             ! Pointer to irb block
;  449          0629  2     NEXT_PTR;
;  450          0630  2
;  451          0631  2 PTR = .CNF$GQ_IRBLST;                   ! Start at first link context block
;  452          0632  2 WHILE .PTR NEQ CNF$GQ_IRBLST             ! Until end of linked list,
;  453          0633  2 DO
;  454          0634  3     BEGIN
;  455          0635  3     NEXT_PTR = .PTR [IRB$L_LINK];
;  456          0636  3     CNF$CLOSE_REQUEST_LINK(.PTR);       ! Abort the incoming link
;  457          0637  3     PTR = .NEXT_PTR;                    ! and link to next in chain
;  458          0638  2     END;
;  459          0639  2
;  460          0640  2 PTR = .CNF$GQ_CIRSURLST;                ! Start at first circuit block
;  461          0641  2 WHILE .PTR NEQ CNF$GQ_CIRSURLST          ! Until end of linked list,
;  462          0642  2 DO
;  463          0643  3     BEGIN
;  464          0644  3     CNF$DISABLE_SURVEIL (.PTR);         ! and delete the circuit
;  465          0645  3     PTR = .PTR [CIR$L_LINK];            ! Link to next one
;  466          0646  2     END;
;  467          0647  2
;  468          0648  2 CNF$B_SURVEILLANCE_SET = FALSE;         ! So it will die quietly
;  469          0649  2
;  470          0650  1 END;                                    ! End routine shutdown


                                000C 00000 SHUTDOWN:
                                           .WORD   Save R2,R3                                          ; 0605
                    52  0000G   CF  DO 00002       MOVL    CNF$GQ_IRBLST, PTR                       ; 0631
                    50  0000G   CF  9E 00007 1$:    MOVAB   CNF$GQ_IRBLST, R0                       ; 0632
                    50          52  D1 0000C       CMPL    PTR, R0                                  ;
```

```
                                    0F  13  0000F          BEQL    2$                                      ;
                          53        62  D0  00011          MOVL    (PTR), NEXT_PTR                         ; 0635
                                    52  DD  00014          PUSHL   PTR                                     ; 0636
                    FF48  CF        01  FB  00016          CALLS   #1, CNF$CLOSE_REQUEST_LINK              ;
                          52        53  D0  0001B          MOVL    NEXT_PTR, PTR                           ; 0637
                                    E7  11  0001E          BRB     1$                                      ; 0632
                          52  0000G CF  D0  00020  2$:      MOVL    CNF$GQ_CIRSURLST, PTR                   ; 0640
                          50  0000G CF  9E  00025  3$:      MOVAB   CNF$GQ_CIRSURLST, R0                    ; 0641
                          50        52  D1  0002A          CMPL    PTR, R0                                 ;
                                    0C  13  0002D          BEQL    4$                                      ;
                                    52  DD  0002F          PUSHL   PTR                                     ; 0644
                    0000G CF        01  FB  00031          CALLS   #1, CNF$DISABLE_SURVEIL                 ;
                          52        62  D0  00036          MOVL    (PTR), PTR                              ; 0645
                                    EA  11  00039          BRB     3$                                      ; 0641
                              0000G CF  D4  0003B  4$:      CLRL    CNF$B_SURVEILLANCE_SET                  ; 0648
                                    04  0003F              RET                                             ; 0650

; Routine Size:  64 bytes,    Routine Base:  $CODE$ + 0256
```

```
;  472          0651  1 %SBTTL 'CNF$SOLICIT_REQUEST'
;  473          0652  1 GLOBAL ROUTINE CNF$SOLICIT_REQUEST (irb): NOVALUE =
;  474          0653  1
;  475          0654  1 !---
;  476          0655  1 !
;  477          0656  1 !  This routine is called to obtain requests from the incoming
;  478          0657  1 !  logical link.  Each incoming request is immediately queued
;  479          0658  1 !  to the disposal queue for the appropriate action.
;  480          0659  1 !  It is first called directly by OPEN_REQUEST_LINK which is executing
;  481          0660  1 !  off the work queue, and thereafter calls are placed on the work queue
;  482          0661  1 !  by the AST routine, REQUEST_RECEIVED.
;  483          0662  1 !
;  484          0663  1 ! Inputs:
;  485          0664  1 !
;  486          0665  1 !       irb = Address of incoming request block
;  487          0666  1 !
;  488          0667  1 ! Outputs:
;  489          0668  1 !
;  490          0669  1 !       None
;  491          0670  1 !---
;  492          0671  1
;  493          0672  2 BEGIN
;  494          0673  2
;  495          0674  2 MAP
;  496          0675  2     IRB:        REF BBLOCK;             ! Address of incoming request block
;  497          0676  2
;  498          0677  2 LOCAL
;  499          0678  2     STATUS;
;  500          0679  2
;  501          0680  2 CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  502          0681  2         $DESCRIPTOR ('cnf$solicit_request'));
;  503          0682  2
;  504        P 0683  2 STATUS = $QIO(FUNC = IO$_READVBLK,        ! Get request from incoming link
;  505        P 0684  2                   CHAN = .IRB [IRB$W_CHAN],
;  506        P 0685  2                   EFN = CNF$C_ASYNCH_EFN,
;  507        P 0686  2                   IOSB = IRB [IRB$W_IOSB],! Address of I/O status block
;  508        P 0687  2                   ASTADR = REQUEST_RECEIVED,! Address of completion routine
;  509        P 0688  2                   ASTPRM = .IRB,          ! Giving irb as routine parameter
;  510        P 0689  2                   P1 = IRB [IRB$T_REQUEST], ! Address of request buffer
;  511          0690  2                   P2 = IRB$C_MAXRQSTLEN); ! Length of request buffer
;  512          0691  2
;  513          0692  2 IF NOT .STATUS                          ! If unsuccessful
;  514          0693  2 THEN
;  515          0694  3     BEGIN                               ! Don't signal a fatal error just because
;  516          0695  3     IF (.STATUS NEQ SS$_LINKABORT) AND  !  the partner went away.
;  517          0696  4        (.STATUS NEQ SS$_LINKEXIT)
;  518          0697  3     THEN
;  519          0698  3         SIGNAL (CNF$_LINK, 0, .STATUS); ! then report error
;  520          0699  3
;  521          0700  3     WKQ$ADD_WORK_ITEM( CNF$CLOSE_REQUEST_LINK, .IRB);
;  522          0701  3     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  523          0702  3                 $DESCRIPTOR ('cnf$solicit_request  %%CNF$CLOSE_REQUEST_LINK'));
;  524          0703  2     END;
;  525          0704  2
;  526          0705  1 END;                                    ! End routine cnf$solicit_request
```

```
                                                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                                                    45  43  41  52  54  001DC P.ABJ:  .ASCII  \TRACE\                                        ;
                                                                                        001E1          .BLKB   3                                               ;
                                                                                00000005        001E4 P.ABI:  .LONG   5                                         ;
                                                                                00000000'       001E8         .ADDRESS P.ABJ                            ;
71  65  72  5F  74  69  63  69  6C  6F  73  24  66  6E  63  001EC P.ABL:  .ASCII  \cnf$solicit_request\                                ;
                                                            74  73  65  75  001FB                                                       ;
                                                                            001FF          .BLKB   1                                                       ;
                                                                                00000013        00200 P.ABK:  .LONG   19                                        ;
                                                                                00000000'       00204         .ADDRESS P.ABL                            ;
                                                                    45  43  41  52  54  00208 P.ABN:  .ASCII  \TRACE\                                       ;
                                                                                        0020D          .BLKB   3                                                ;
                                                                                00000005        00210 P.ABM:  .LONG   5                                         ;
                                                                                00000000'       00214         .ADDRESS P.ABN                            ;
71  65  72  5F  74  69  63  69  6C  6F  73  24  66  6E  63  00218 P.ABP:  .ASCII  \cnf$solicit_request  %%CNF$CLOSE_REQUEST\                ;
4F  4C  43  24  46  4E  43  25  25  20  20  74  73  65  75  00227                                                                           ;
                        54  53  45  55  51  45  52  5F  45  53  00236                                                                       ;
                                            4B  4E  49  4C  5F  00240          .ASCII  \_LINK\                                              ;
                                                                00245          .BLKB   3                                                    ;
                                                                                00000002D       00248 P.ABO:  .LONG   45                                        ;
                                                                                00000000'       0024C         .ADDRESS P.ABP                            ;


                                                                                .PSECT  $CODE$,NOWRT,2

                                                                        0004 00000              .ENTRY  CNF$SOLICIT_REQUEST, Save R2                    ; 0652
                                                                0000'   CF   9F 00002           PUSHAB  P.ABK                                           ; 0681
                                                                0000'   CF   9F 00006           PUSHAB  P.ABI                                           ; 0680
                                                                        01   DD 0000A          PUSHL   #1                                              ;
                                                        0000G   CF           03   FB 0000C      CALLS   #3, CNF$TRACE                                   ;
                                                                             7E   7C 00011      CLRQ    -(SP)                                           ; 0690
                                                                             7E   7C 00013      CLRQ    -(SP)                                           ;
                                                                7E           FA   8F 9A 00015   MOVZBL  #250, -(SP)                                     ;
                                                                52           04   AC D0 00019   MOVL    IRB, R2                                         ;
                                                                             65   A2 9F 0001D   PUSHAB  101(R2)                                        ;
                                                                             52   DD 00020      PUSHL   R2                                              ;
                                                                0000V   CF   9F 00022           PUSHAB  REQUEST_RECEIVED                                ;
                                                                        0C   A2 9F 00026        PUSHAB  12(R2)                                          ;
                                                                             31   DD 00029      PUSHL   #49                                             ;
                                                                7E           0A   A2 32 0002B   CVTWL   10(R2), -(SP)                                   ;
                                                        00000000G   8F   DD 0002F           PUSHL   #CNF$C_ASYNCH_EFN                               ;
                                                00000000G       00   0C   FB 00035        CALLS   #12, SYS$QIO                                    ;
                                                                3D   50   E8 0003C          BLBS    STATUS, 2$                                      ; 0692
                                                000020E4        8F   50   D1 0003F          CMPL    STATUS, #8420                                   ; 0695
                                                                     1A   13 00046          BEQL    1$                                              ;
                                                000020F4        8F   50   D1 00048          CMPL    STATUS, #8436                                   ; 0696
                                                                     11   13 0004F          BEQL    1$                                              ;
                                                                     50   DD 00051          PUSHL   STATUS                                          ; 0698
                                                                     7E   D4 00053          CLRL    -(SP)                                           ;
                                                        00000000G   8F   DD 00055           PUSHL   #CNF$_LINK                                      ;
                                                00000000G       00   03   FB 0005B        CALLS   #3, LIB$SIGNAL                                  ;
                                                                     52   DD 00062  1$:     PUSHL   R2                                              ; 0700
                                                                FEBB CF   9F 00064          PUSHAB  CNF$CLOSE_REQUEST_LINK                          ;
                                                        0000G   CF           02   FB 00068  CALLS   #2, WKQ$ADD_WORK_ITEM                           ;
```

```
                                0000'  CF  9F  0006D          PUSHAB  P.ABO                          ; 0702
                                0000'  CF  9F  00071          PUSHAB  P.ABM                          ; 0701
                                       01  DD  00075          PUSHL   #1                             ;
                          0000G  CF            03  FB  00077  CALLS   #3, CNF$TRACE                  ;
                                               04  0007C 2$:  RET                                    ; 0705

; Routine Size:  125 bytes,    Routine Base:  $CODE$ + 0296
```

```
;   528          0706  1 %SBTTL 'request_received'
;   529          0707  1 ROUTINE REQUEST_RECEIVED (irb): NOVALUE =
;   530          0708  1
;   531          0709  1 !---
;   532          0710  1 !
;   533          0711  1 !  This AST routine is called when a new request has come
;   534          0712  1 !  in over the logical link.  The request is queued to the
;   535          0713  1 !  work queue.
;   536          0714  1 !
;   537          0715  1 ! Inputs:
;   538          0716  1 !
;   539          0717  1 !       irb = Address of incoming request block
;   540          0718  1 !
;   541          0719  1 ! Outputs:
;   542          0720  1 !
;   543          0721  1 !       None
;   544          0722  1 !---
;   545          0723  1
;   546          0724  2 BEGIN
;   547          0725  2
;   548          0726  2 MAP
;   549          0727  2     IRB:        REF BBLOCK;             ! Address of incoming request block
;   550          0728  2
;   551          0729  2 CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   552          0730  2         $DESCRIPTOR ('request_received'));
;   553          0731  2
;   554          0732  2 IF NOT .IRB [IRB$W_IOSB]                 ! If error from QIO,
;   555          0733  2 THEN
;   556          0734  3     BEGIN
;   557          0735  3     IF (.IRB [IRB$W_IOSB] NEQ SS$_LINKABORT) AND
;   558          0736  4         (.IRB [IRB$W_IOSB] NEQ SS$_LINKEXIT)
;   559          0737  3     THEN
;   560          0738  3         SIGNAL (CNF$_LINK, 0, .IRB [IRB$W_IOSB]);       ! then report the error
;   561          0739  3     WKQ$ADD_WORK_ITEM( CNF$CLOSE_REQUEST_LINK, .IRB);   ! close the link until re-established
;   562          0740  3     RETURN;
;   563          0741  2     END;
;   564          0742  2
;   565          0743  2 !
;   566          0744  2 !       Log the contents of the incoming message
;   567          0745  2 !
;   568          0746  3 BEGIN
;   569          0747  3 LOCAL DATA_DSC : BBLOCK [DSC$C_S_BLN];
;   570          0748  3
;   571          0749  3 DATA_DSC = 0;
;   572          0750  3 DATA_DSC [DSC$W_LENGTH] = .IRB [IRB$W_IOSB1];
;   573          0751  3 DATA_DSC [DSC$A_POINTER] = IRB [IRB$T_REQUEST];
;   574          0752  3 CNF$LOG_DATA (DBG$C_NICE, $DESCRIPTOR('NICE received'),0, DATA_DSC);
;   575          0753  2 END;
;   576          0754  2
;   577          0755  2 WKQ$ADD_WORK_ITEM (CNF$PROCESS_REQUEST, ! Queue request
;   578          0756  2     .IRB);
;   579          0757  2
;   580          0758  1 END;                                    ! End routine request_received


                                                                .PSECT  $PLIT$,NOWRT,NOEXE,2
```

```
                              45 43 41 52 54  00250 P.ABR:   .ASCII  \TRACE\                                   ;
                                              00255          .BLKB   3
                                   00000005   00258 P.ABQ:   .LONG   5                                         ;
                                   00000000'  0025C          .ADDRESS P.ABR                                    ;
65 76 69 65 63 65 72 5F 74 73 65 75 71 65 72  00260 P.ABT:   .ASCII  \request_received\                        ;
                                         64   0026F                                                            ;
                                   00000010   00270 P.ABS:   .LONG   16                                        ;
                                   00000000'  00274          .ADDRESS P.ABT                                    ;
      64 65 76 69 65 63 65 72 20 45 43 49 4E  00278 P.ABV:   .ASCII  \NICE received\                           ;
                                              00285          .BLKB   3
                                   0000000D   00288 P.ABU:   .LONG   13                                        ;
                                   00000000'  0028C          .ADDRESS P.ABV                                    ;


                                                             .PSECT  $CODE$,NOWRT,2

                                   0004 00000 REQUEST_RECEIVED:
                                                             .WORD   Save R2                                   ; 0707
                   5E            08  C2 00002                SUBL2   #8, SP                                    ;
                         0000'   CF  9F 00005                PUSHAB  P.ABS                                     ; 0730
                         0000'   CF  9F 00009                PUSHAB  P.ABQ                                     ; 0729
                                 01  DD 0000D                PUSHL   #1                                        ;
             0000G  CF           03  FB 0000F                CALLS   #3, CNF$TRACE                             ;
                    52      04   AC  D0 00014                MOVL    IRB, R2                                   ; 0732
                    2B      0C   A2  E8 00018                BLBS    12(R2), 2$                                ;
             20E4   8F      0C   A2  B1 0001C                CMPW    12(R2), #8420                             ; 0735
                                 1B  13 00022                BEQL    1$                                        ;
             20F4   8F      0C   A2  B1 00024                CMPW    12(R2), #8436                             ; 0736
                                 13  13 0002A                BEQL    1$                                        ;
                    7E      0C   A2  32 0002C                CVTWL   12(R2), -(SP)                             ; 0738
                                 7E  D4 00030                CLRL    -(SP)                                     ;
                     00000000G   8F  DD 00032                PUSHL   #CNF$_LINK                                ;
        00000000G   00           03  FB 00038                CALLS   #3, LIB$SIGNAL                            ;
                                 52  DD 0003F 1$:            PUSHL   R2                                        ; 0739
                          FE61   CF  9F 00041                PUSHAB  CNF$CLOSE_REQUEST_LINK                    ;
                                 20  11 00045                BRB     3$                                        ;
                                 6E  D4 00047 2$:            CLRL    DATA_DSC                                  ; 0749
                    6E      0E   A2  B0 00049                MOVW    14(R2), DATA_DSC                          ; 0750
              04    AE      65   A2  9E 0004D                MOVAB   101(R2), DATA_DSC+4                       ; 0751
                                 5E  DD 00052                PUSHL   SP                                        ; 0752
                                 7E  D4 00054                CLRL    -(SP)                                     ;
                         0000'   CF  9F 00056                PUSHAB  P.ABU                                     ;
                                 7E  D4 0005A                CLRL    -(SP)                                     ;
             0000G  CF           04  FB 0005C                CALLS   #4, CNF$LOG_DATA                          ;
                                 52  DD 00061                PUSHL   R2                                        ; 0756
                         0000G   CF  9F 00063                PUSHAB  CNF$PROCESS_REQUEST                       ; 0755
             0000G  CF           02  FB 00067 3$:            CALLS   #2, WKQ$ADD_WORK_ITEM                     ;
                                     04 0006C                RET                                               ; 0758

; Routine Size:  109 bytes,    Routine Base:  $CODE$ + 0313
```

```
;  582     0759  1 END                       ! End of module CNFINTRPT
;  583     0760  0 ELUDOM


                                                        .EXTRN  LIB$SIGNAL

;                               PSECT SUMMARY

;       Name                    Bytes                           Attributes

;  $OWN$                           8  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $PLIT$                        656  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                        896  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                           Library Statistics

;                                    --------  Symbols  --------      Pages       Processing
;       File                         Total     Loaded   Percent      Mapped      Time

;  _$255$DUA28:[SYSLIB]STARLET.L32;1   9776         16         0         581         00:01.0
;  _$255$DUA28:[SHRLIB]NET.L32;1       1279          0         0          63         00:00.9
;  _$255$DUA28:[SHRLIB]NMALIBRY.L32;1   887          0         0          47         00:00.8



;                                COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:CNFINTRPT/OBJ=OBJ$:CNFINTRPT MSRC$:CNFINTRPT/UPDATE=(ENH$:CNFINTRPT)

; Size:          896 code + 664 data bytes
; Run Time:          00:19.2
; Elapsed Time:      00:41.8
; Lines/CPU Min:      2370
; Lexemes/CPU-Min: 20292
; Memory Used:  116 pages
; Compilation Complete
```

NICNF

CNFDEF
SDL

CNFDEF
LIS

NETTRN
LIS

NICONFIG
MAP

NETTREE
LIS

CNFMAIN
LIS

CNFREQUES
LIS

SERVER
LIS

CNFINTRPT
LIS

CNFWQDEF
SDL

CNFPREFIX
REQ

CNFMSG
LIS